The Great Debate:

The Construction Schedule

CPM as Tool ... or Sword and Shield?
Owner versus Contractor



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INTRODUCTION & OUTLINE

Owner's Representative
John Orr, PSP
URS / AECOM
Senior Scheduler



Contractor's Representative Jeff Milo, PSP Brasfield & Gorrie Sr. Planner / Scheduler





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The Third Law of ScheduleDynamics:

For every PSP, there is an equal and opposite PSP



OUTLINE

- Shared Goals in Scheduling
- The Owner Writes the Schedule Specifications
- The Contractor Hires the Scheduler
- The Baseline Schedule Review
- Cost & Resource Loading Issues
- The Schedule Updating Process
- Construction Delays and Schedule Changes
- Substantial Completion
- Conclusions



SHARED GOALS IN SCHEDULING

- Confidence in the projected completion date
- The entire project scope is included in the schedule
- Reflects the contractor's project planning for construction
- Tool for managing and coordinating the work
- Framework for analysis of impacts from unexpected events
- Cost loading to facilitate progress payments



THE OWNER WRITES THE CONTRACT SCHEDULING SPECIFICATIONS



YOU SIGNED IT; NOW DEAL WITH IT!

THE OWNER WRITES THE CONTRACT SCHEDULING SPECIFICATIONS

- The schedule requirements should be current and reasonable, based on the needs of the project
- The baseline should include a "Basis of Schedule" narrative to explain the planning, execution and (sub)contracting strategy, and the schedule's development



THE CONTRACTOR HIRES THE SCHEDULER



WHO BUILT THIS MESS, ANYWAY?

THE CONTRACTOR HIRES
THE SCHEDULER

• The bid documents should describe the requirements of the schedule ... and of the scheduler!



THE BASELINE SCHEDULE REVIEW



OH, DARLING, ITS OUR FIRST FIGHT!

THE BASELINE SCHEDULE REVIEW

- The Schedule Matches the Contract Performance Period
- Reasonable Critical Path and Levels of Float
- Schedule Contingency
- An Appropriate Level of Detail
- Inclusion of All Trades, and their Correct Sequencing and Handoffs



OH, DARLING, ITS OUR FIRST FIGHT!

THE BASELINE SCHEDULE REVIEW

- Float should be a shared resource, to be properly used by the first party that needs it
- Schedule Contingency must be defined, determined (risk), placed and managed, not just added to activity durations as "padding"



COST & RESOURCE LOADING



SHOW ME THE MONEY!

COST & RESOURCE LOADING

- Front-end Cost Loading
- Resource Loading



SCHEDULE PROGRESS UPDATES



WHERE ARE WE???

SCHEDULE PROGRESS UPDATES

Schedules Measure Time, not Dollars



CONSTRUCTION DELAYS



CHANGE HAPPENS!

CONSTRUCTION DELAYS

- Construction Delays
- Other Working Schedules
- No-Fault Scheduling







SUBSTANTIAL COMPLETION



ARE WE THERE YET?

SUBSTANTIAL COMPLETION

The Importance of the Back End of the Schedule



CONCLUSIONS?

CONCLUSIONS.

- What Owners Need to Remember About Contractors
- What Contractors Need to Remember About Owners



QUESTIONS?



